

1111 W. 35th Street Chicago, IL 60609 USA Customer Support: (773) 869-1234 www.tripplite.com Owner's Manual

# SmartPro® 2200XLT

Line-Interactive UPS Systems (230V)

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### Safety



This manual contains important instructions and warnings that should be followed during the installation, operation and storage of all Tripp Lite UPS Systems.

#### **UPS Location Warnings**

- Install your UPS indoors, away from excess moisture or heat, dust or direct sunlight.
- For best performance, keep the indoor temperature between  $32^{\circ}$  F and  $104^{\circ}$  F (between  $0^{\circ}$  C and  $40^{\circ}$  C).
- Leave adequate space around all sides of the UPS for proper ventilation.

#### **UPS Connection Warnings**

- Connect your UPS to a properly grounded AC power outlet. Do not remove or modify the UPS's plug.
- Do not use two-prong adapters with the UPS's plug. Do not plug your UPS into itself; this will damage the UPS and void your warranty.
- If you are connecting your UPS to a motor-powered AC generator, the generator must provide clean, filtered computer-grade output.

#### **Equipment Connection Warnings**

- Do not use Tripp Lite UPS Systems for life support applications in which a malfunction or failure of a Tripp Lite UPS System could cause failure or significantly alter the performance of a life-support device.
- Do not connect surge suppressors to the output of your UPS. This may damage your UPS and will void both the surge suppressor and UPS warranties.

#### **Battery Warnings**

- Your UPS does not require routine maintenance. Do not open your UPS for any reason. There are no user-serviceable parts inside.
- Battery replacement must be performed by qualified service personnel. Because the batteries present a risk of electrical shock and burn from high short-circuit current, observe proper precautions. Unplug and turn off the UPS before performing battery replacement. Use tools with insulated handles and replace the existing batteries with the same number and type of new batteries (Sealed Lead-Acid). Do not open the batteries. Do not short or bridge the battery terminals with any object.
- The UPS batteries are recyclable. Refer to local codes for disposal requirements or call 1-800-SAV-LEAD (1-800-728-5323) for complete recycling information. Do not dispose of the batteries in a fire.
- Connect only Tripp Lite battery packs with the correct voltage (see voltage requirements label on the rear of your UPS) and the correct connector color to match your UPS's External Battery Connector.
- Do not plug UPS in or operate without batteries.

#### Installation



## Plug your UPS into an electrical outlet.

The SmartPro 2200XLT should be connected to a 15-amp dedicated circuit.

### **(2**)

# Plug your equipment into your UPS.

Your UPS is designed to support only computer equipment. Connecting household appliances, laser printers or surge suppressors is not recommended.



#### Turn your UPS ON.

Set the System Enable Switch (DIP Switch #4, UPS back panel) to the "ENABLE" (UP) position.

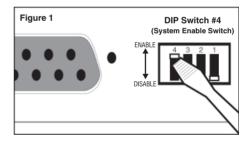
(See Figure 1)

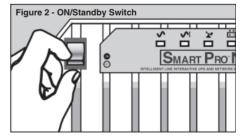
This switch activates the battery charger and microprocessor.

The "\sqrt{"" light will flash until you engage the ON/Standby Switch to activate the "ON" mode.

 Engage the momentary ON/Standby Switch (UPS front panel) and release it to activate the "ON" mode and supply power to the UPS receptacles.

(See Figure 2)

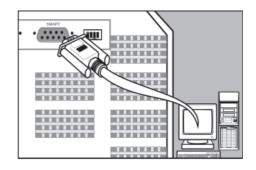




# DB9 Port Connection -Optional-\*

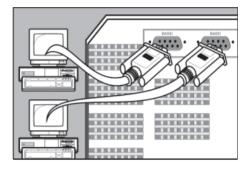
1

Using Tripp Lite cable, connect your primary server's DB9 port to the single DB9 port labeled SMART/LAN 4.1 (which provides complete intelligent RS-232 communications) using the included cable labelled 73-743.\*\*

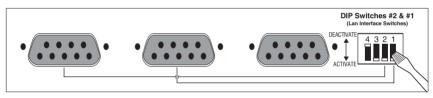


# 2 If you have additional computers:

- a. Connect them to the DB9 ports labeled BASIC/LAN 2.2 (which provide basic, contact-closure shutdown capabilities) using the included cables labelled 73-844.
- b. Set their corresponding LAN Interface DIP Switches to the ACTIVATE (DOWN) position. See diagram for which switch controls which port.\*\*\*



2a. Back Panel



2b. Back Panel



# Load software and run the installation program appropriate for your operating system.

- \* Serial port connections are optional. Your UPS will function properly without these connections.
- \*\* The SMART/LAN 4.1 port is always enabled and is not controlled by the LAN Interface DIP Switches.
- \*\*\* If you do not connect a computer to either of the BASIC/LAN 2.2 ports, set their corresponding LAN Interface DIP Switches to the DEACTIVATE (UP) position. Note: DIP Switch #3 has no function.

### **Basic Operation**

#### **Switches**

#### System Enable Switch (DIP Switch #4)



This switch is located in the set of 4 switches next to the UPS's DB9 ports. It activates the battery charger and intelligent microprocessor. <u>Always</u> leave it in the "ENABLE" (UP) position when your UPS is plugged in. Set the switch to "DISABLE" (DOWN) only if you store or ship your UPS (to reduce battery drain).

Note: the " vi light will flash until you engage the ON/Standby Switch to activate the "ON" mode (power ON at the UPS receptacles).

#### ON/Standbu Switch



This momentary switch controls power to the UPS receptacles. Engage it momentarily and release it to toggle between the "ON" mode (power ON at the UPS receptacles) and "Standby" mode (power OFF at the UPS receptacles).

#### Mute/Test Switch



Use this momentary switch to do two things:

#### Silence the blackout alarm

Engage this switch and release it. Note: when the battery is nearly depleted, the alarm resumes (and cannot be silenced) to alert you to immediately shut down connected equipment.

#### Test your UPS's battery charge

Leave your connected equipment ON. With your UPS plugged in and completely turned ON, engage this switch; hold it there for 5 seconds and release it. The UPS will momentarily switch to battery to test its charge. The "z" light will turn ON and the alarm may sound if your UPS fails a self-test and/or the UPS battery is less than fully charged. Let the UPS charge for 12 hours and perform a second self-test. If the light continues to stay on, contact Tripp Lite for service. CAUTION: Do not unplug your UPS to test its batteries. This will remove safe electrical grounding and may introduce a damaging surge into your network connections.

#### **Indicator Lights**

All Indicator Light descriptions apply when the UPS is plugged into a wall outlet and turned ON.



This green light will shine *constantly* to indicate AC power is available at the receptacles. It will *flash* to indicate AC power <u>is not</u> available. (See "System Enable Switch" and "ON/Standby Switch" descriptions above.)



This multi-colored light displays 7 separate UPS battery charge conditions. It will turn from red (low) to yellow (medium) to green (full) to show you the level of battery charge. If the light is constant, then your UPS is operating from line power and the battery is charging. If the light is flashing, then your UPS is operating from battery power and the battery is discharging. When the light flashes red, close any files you are working on and shut down your computer.



Whenever your UPS is automatically correcting high or low AC line voltage, this green light will turn ON and the UPS will gently click. The more the UPS has to correct voltage, the more the green light will turn ON and the more the UPS will click. These are both normal, automatic operations of your UPS, and no action is required on your part.



This red light will turn ON if your UPS fails a self-test and/or the UPS battery is less than fully charged. Let the UPS charge for 12 hours and perform a second self-test. If the light continues to stay on, contact Tripp Lite for service.



This multi-colored light displays 4 separate UPS load conditions. It will turn from green (low) to yellow (medium) to red (high) as you connect equipment to show you the load level your UPS is supporting. When the light is red your UPS is supporting a load above 85% of its capacity. If the red light begins flashing, your UPS is severely overloaded. Remove overload immediately until light stops flashing.

#### Other UPS Features

#### L6-20 AC Receptacle



This locking receptacle provides your connected equipment with AC line power during normal operation and battery power during blackouts and brownouts. It also protects your equipment against damaging surges and line noise. You can remotely reboot connected equipment by turningthe UPS OFF and ON using Tripp Lite UPS software. See software instructions for details.

#### SMART/LAN 4.1 (RS-232) Port



The RS-232 port connects your UPS to any workstation or server. Use with Tripp Lite software and cabling to monitor and manage network power and automatically save open files and shut down equipment during a blackout. This port uses RS-232 communications to transmit UPS and power conditions. Select models feature plug-and-play capability. Contact Tripp Lite Customer Support for more information and a list of available SNMP, network management and connectivity products.

#### BASIC/LAN 2.2 (Contact Closure) Ports (2)



Also used to connect your UPS to any workstation or server. Use with Tripp Lite software and cabling to automatically save open files and shut down equipment during a blackout. These ports use contact-closure signals to indicate line-fail and low-battery status.

#### External Battery Connector



Use this to connect additional Tripp Lite battery packs for additional runtime. Refer to the label next to the connector for appropriate Tripp Lite battery pack to connect. Refer to instructions available with the battery pack for complete connection information and safety warnings.

#### LAN Interface DIP Switches



DIP Switches #1 and #2 activate or deactivate remote shutdown through the "BASIC" Contact-Closure Ports. See "DB9 Port Connection" on page 4 for which switch controls which port. Note: DIP Switch #3 has no function. DIP Switch #4 serves as the UPS's "System Enable Switch."

### Storage & Service

#### Storage

Turn your UPS OFF: first engage the ON/Standby Switch and release it to place your UPS in the "Standby" mode; then set the System Enable Switch (Jumper #4, UPS rear panel) to "DISABLE" (down); finally, disconnect the UPS power cord from the wall outlet. If you plan on storing your UPS for an extended period of time, recharge the UPS batteries once every three months. Follow steps #1 and #3 in the Quick Installation section and allow the UPS to charge from 4 to 6 hours. If you leave your UPS batteries discharged for an extended period of time, they will suffer permanent loss of capacity.

#### Service

If returning your UPS to Tripp Lite, please carefully pack the UPS using the ORIGINAL PACKING MATERIAL that came with the unit. Enclose a letter describing the symptoms of the problem. If the UPS is within the 2 year warranty period, enclose a copy of your sales receipt.

### **Specifications**

	Smart 2200XLT	
Output Capacity (VA/Watts):	2200/1750	
Battery Runtime (Half Load/Full Load) Minutes:	27+/11+*	
Battery Recharge Time:	2-4 hrs.*	
Approvals:	UL, cUL	
Nominal Input Voltage/Frequency:	208V/60 Hz	
On-Line Input Voltage Range:	173-250 volts	
Voltage-Regulated Output Voltage Range:	$230V \pm 9\%$	
On-Battery Output Voltage Range:	230V ± 5%	
Output Waveform —Line Mode:	filtered sinewave	
Output Waveform —Battery Mode:	PWM sine wave	
AC Surge Suppression :	exceeds IEEE 587 Cat. A & B standards	
AC Noise Attenuation:	>40 dB	
AC Protection Modes:	H to N, H to G, N to G	

<sup>\*</sup>Runtime can be extended with the connection of the appropriate Tripp Lite external battery packs. With the addition of external battery packs, battery recharge time will increase.





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